FIG.1

FIG.2

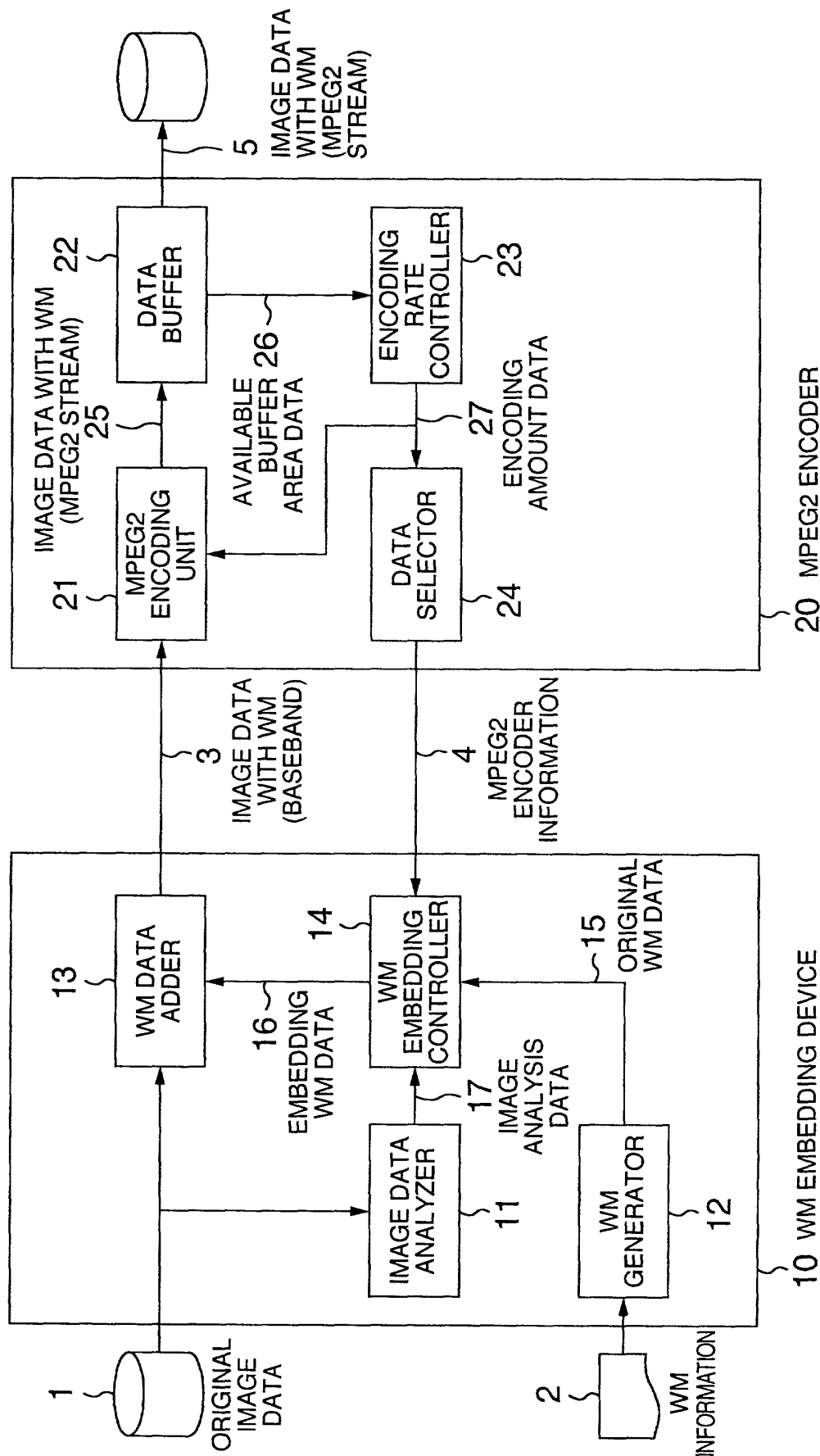*Robert C. Colwell, Reg. No. 27,431*   *(650) 326-2400*

Applicant: Akio Fukushima, *et al.*
Title: Electronic Watermark Embedding Apparatus and Method...
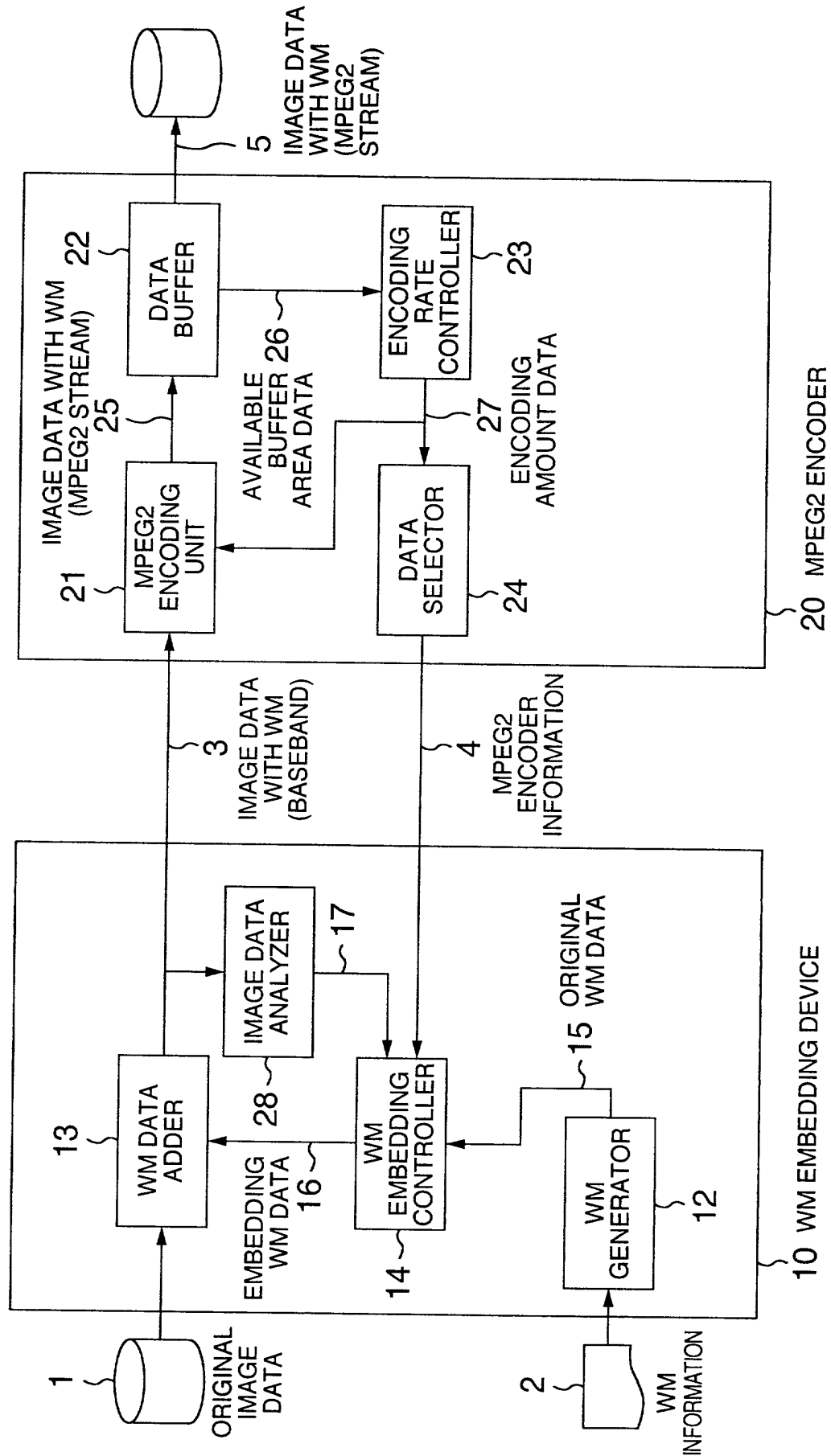**Atty Docket No.** 16869S-033500
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FIG.3

ADDITION ⊕

IMAGE DATA (A)

200	200	200	800	200	200	200	200
200	800	200	200	200	800	200	200
200	200	200	200	800	200	200	200
200	200	200	200	200	800	200	200
200	200	200	200	200	200	200	200
200	200	800	200	200	200	200	200
200	200	200	200	200	200	200	200
200	200	200	200	200	200	200	200

ELECTRONIC WATERMARK DATA (B)

1	1	1	0	0	0	1	
-1	1	1	0	0	0	1	
-1	-1	0	1	1	1	0	
0	0	0	1	1	1	0	
0	0	0	1	1	1	0	
-1	-1	-1	0	0	0	-1	
-1	-1	0	0	0	0	-1	
-1	-1	-1	0	0	0	-1	

IMAGE DATA WITH EMBEDDED ELECTRONIC WATERMARK

201	201	201	200	200	200	201	
201	801	201	200	200	200	201	
200	201	201	800	801	801	800	
200	200	200	801	801	801	200	
200	200	200	201	201	201	200	
799	800	200	200	200	200	199	
199	199	200	200	200	200	199	
199	199	199	200	200	200	199	

FIG.4

Robert C. Colwell, Reg. No. 27,431   (650) 326-2400

Applicant: Akio Fukushima, *et al.*
Title: Electronic Watermark Embedding Apparatus and Method...
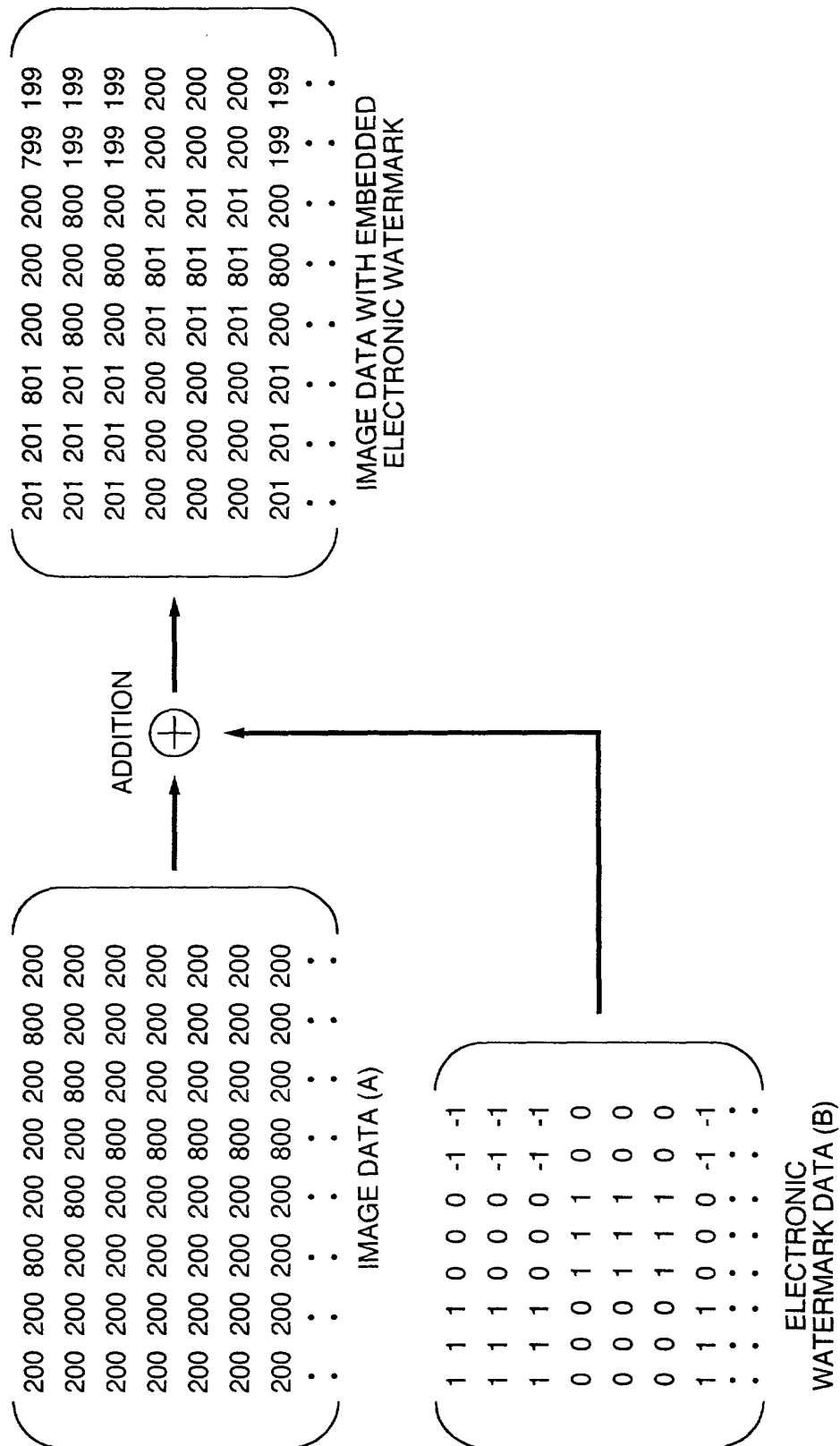**Atty Docket No.** 16869S-033500
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FIG.5

MULTIPLICATION

DEFAULT VALUES FOR INTRA-QUANTIZER-MATRIX

8	16	19	22	26	27	29	34
16	16	22	24	27	29	34	37
19	22	26	27	29	34	34	38
22	22	26	27	29	34	37	40
22	26	27	29	32	35	40	48
26	27	29	32	35	40	48	58
26	27	29	34	38	46	56	69
27	29	35	38	46	56	69	83

$\otimes$

WEIGHTING COEFFICIENT DATA FOR INTRA-QUANTIZER-MATRIX

1	1	1	1	1	1	2	2
1	1	1	1	1	1	2	2
1	1	1	1	1	1	2	2
1	1	1	1	1	1	2	2
1	1	1	1	1	2	2	2
1	1	1	1	2	2	2	2
2	2	2	2	2	2	2	2
2	2	2	2	2	2	2	2

$=$

TRANSFORMED INTRA-QUANTIZER-MATRIX

8	16	19	22	26	27	58	68
16	16	22	24	27	29	68	74
19	22	26	27	29	34	68	76
22	22	26	27	29	34	74	80
22	26	27	29	32	70	80	96
26	27	29	32	70	80	96	116
52	54	58	68	76	92	112	138
54	58	70	76	92	112	138	166

FIG.6